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10/043,575	01/09/2002	Gregory J. Wolff	20412-06364	7975

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EXAMINER

PITARO, RYAN F

ART UNIT	PAPER NUMBER
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2174

DATE MAILED: 12/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/043,575

Applicant(s)

WOLFF ET AL.

Examiner

Ryan F Pitaro

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-42 have been examined.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in **narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited.** The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

3. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 30-41 been renumbered 31-42.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 32, 33, 36,37,38,39,41,42 lack antecedent basis. The examiner notes that the lack of antecedent basis is a result of the error in ordering and suggests re-evaluating each of the renumbered claims to ensure proper dependencies.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 7,8,10-42 are rejected under 35 U.S.C. 101 because the language of the claims raise a question as to whether the claims are directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

Claim Rejections - 35 USC § 102

8. Claims 1,2,4-7,9-12,16-34,40 rejected under 35 U.S.C. 102(e) as being anticipated by Anderson ("Anderson", US 6,499,016).

As per independent claim 1, Anderson discloses an apparatus for direct annotation of objects, the apparatus comprising: a display device for displaying one or more images (Column 2 lines 56-61); an audio input device for receiving an audio input (Column 2 lines 56-61); and a direct annotation creation module coupled to the audio input device and the display device, the direct annotation creation module creating an

annotation object that associates an input audio signal an image displayed on the display device (Column 3 lines 13-17).

As per claim 2, which is dependent on claim 1, Anderson discloses the apparatus of claim 1 further comprising an annotation display module (Column 3 lines 19-22) coupled to the direct annotation creation module, the annotation display module generating symbols or text representing the annotation objects (Column 3 lines 13-17; *corresponding text annotations*).

As per claim 4, which is dependent on claim 1, Anderson discloses The apparatus of claim 1 further comprising: an audio vocabulary storage for storing a plurality of audio signals and corresponding text strings (Figure 3a); an audio vocabulary comparison module coupled to the audio input device (Column 3 lines 66-67), the audio vocabulary storage and the direct annotation creation module (Figure 1), the audio vocabulary comparison module receiving audio input and finding a corresponding text string that matches the audio input (Column 5 lines 31-35); and wherein the direct annotation creation module uses text strings found by the audio vocabulary comparison module to create the audio annotation (Column 5 lines 52-55).

As per claim 5, which is dependent on claim 1, Anderson discloses the apparatus further comprising: an audio vocabulary storage for storing a plurality of audio signals and corresponding text strings (Figure 1); a dynamic vocabulary updating module coupled to the audio vocabulary storage and the audio input device (Figure 1), the dynamic vocabulary updating module for displaying an interface to create a new entry in the audio vocabulary storage (Column 5 lines 38-46), the dynamic vocabulary updating

module receiving an audio input and a text string and creating the new entry in the audio vocabulary storage (Column 5 lines 50-51).

As per claim 6, which is dependent on claim 1, Anderson discloses the apparatus of claim 1 further comprising a media object cache for storing media and annotation objects (Column 4 lines 61-67).

As per independent claim 7, Anderson discloses an apparatus for direct annotation of objects, the apparatus comprising: a direct annotation creation module coupled to receive an input audio signal and reference to an image (Column 4 lines 61-63), the direct annotation creation module creating an annotation object that associates a symbol or text with the image (Column 5 lines 31-35); and an annotation display module coupled to the direct annotation creation module (Figure 1), the annotation display module generating the symbol or text representing the annotation object on a display device (Column 6 lines 26-31, 35-38).

As per independent claim 9, Anderson discloses an apparatus for direct annotation of objects, the apparatus comprising: a media object storage for storing media and annotation objects (Figure 1 item 24); and a direct annotation creation module coupled to receive an input audio signal and a reference to an image (Column 4 lines 61-63), the direct annotation creation module creating an annotation object that associates the input audio signal and the image (Column 5 lines 31-35), the direct annotation creation module storing the audio annotation in the media object storage (Column 5 lines 52-57; *May be deleted*)..

As per independent claim 10, Anderson discloses a method for direct annotation of objects, the method comprising the steps of: displaying an image (Figure 1 item 18); receiving audio input (Column 3 lines 10-13); detecting selection of an image (Column 3 lines 13-17); and creating an annotation between the selected image and the audio input (Column 3 lines 13-17).

As per claim 11, which is dependent on claim 10, Anderson discloses a method where the step of displaying is performed before or simultaneously with the step of receiving (Column 3 lines 10-16; *recording at the time of capture*).

As per claim 12, which is dependent on claim 10, Anderson discloses a method wherein the step of receiving is performed before or simultaneously with the step of displaying (Column 3 lines 10-16; *recording at the time of capture*).

As per claim 16, which is dependent on claim 10, Anderson discloses a method wherein the step of creating an annotation includes creating an annotation object and storing the annotation object in an object storage (Fig 3a).

As per claim 17, which is dependent on claim 10, Anderson discloses a method further comprising the step of recording the audio input received (Column 3 lines 10-13).

As per claim 18, which is dependent on claim 17, Anderson discloses a method wherein the step of creating an annotation includes creating an annotation object and storing the recorded audio input as part of the annotation object (Column 3 lines 39-43).

As per claim 19, which is dependent on claim 10, Anderson discloses a method, further comprising the step of comparing the audio input to a vocabulary to produce text (Column 3 lines 59-65).

As per claim 20, which is dependent on claim 19, Anderson discloses a method, wherein the step of creating an annotation includes creating an annotation object and storing the text as part of the annotation object (Column 5 lines 31-36).

As per claim 21, which is dependent on claim 10, Anderson discloses a method further comprising the steps of comparing the audio input to a vocabulary (Column 5 lines 31-35); determining if the audio input has a matching entry in the vocabulary (Column 5 lines 36-38); and storing the entry as part of the annotation object if the audio input has a matching entry in the vocabulary (Column 5 lines 52-57).

As per claim 22, which is dependent on claim 21, Anderson discloses a method further comprising the steps of: determining if the audio input has a close match in the vocabulary (Column 5 lines 36-38); displaying the close matches (Column 5 lines 40-46;*options*); receiving input selecting a close match (Column 5 lines 40-46;*options chosen*); and storing the selected close match as part of the annotation object if the audio input has a close match in the vocabulary (Column 5 lines 52-57).

As per claim 23, which is dependent on claim 22, Anderson discloses the method, further comprising the step of displaying a message that the image has not been annotated if there is neither a matching entry in the vocabulary nor a close match in the vocabulary (Column 5 lines 47-51).

As per claim 24, which is dependent on claim 22, Anderson discloses a method, further comprising the following steps if there is neither a matching entry in the vocabulary nor a close match in the vocabulary: receiving text input corresponding to the audio input (Column 5 lines 47-51;*email for instant messages is text*); updating the vocabulary with a new entry including the audio input and the text input (Column 5 lines 52-57*after corrected*); and wherein the received text is stored as part of the annotation object (Column 5 lines 52-57; *after corrected*).

As per claim 25, which is dependent on claim 10, Anderson discloses a method, further comprising the steps of: receiving text input corresponding to the audio input (Column 5 lines 47-51); updating the vocabulary with a new entry including the audio input and the text input (Column 5 lines 52-57).

As per independent claim 26, Anderson discloses a method for direct annotation of objects, the method comprising the steps of: displaying an image (Figure 1 item 18); receiving audio input (Column 3 lines 10-13); detecting selection of an image (Column 3 lines 13-17); comparing the audio input to a vocabulary to produce text (Column 3 lines 13-16); and creating an annotation between the selected image and the text (Column 3 lines 13-16).

As per claim 27, which is dependent on claim 26, Anderson discloses further comprising the step of recording the audio input received (Column 3 lines 39-42).

As per claim 28, which is dependent on claim 27, Anderson discloses the method, wherein the step of creating an annotation includes creating an annotation

object including a reference to the selected image, the recorded audio input and the text (Figure 3a), and storing the annotation object in an object storage (Figure 1 item 24).

As per claim 29, which is dependent on claim 26, Anderson discloses the method, wherein the step of creating an annotation includes creating an annotation object and storing the text as part of the annotation object (Column 3 lines 30-39).

As per claim 30, which is dependent on claim 26, Anderson discloses a method further comprising the steps of determining if the audio input has a matching entry in the vocabulary (Column 5 lines 56-41); and storing the entry as part of the annotation object if the audio input has a matching entry in the vocabulary (Column 5 lines 52-57).

As per claim 31, which is dependent on claim 29, Anderson discloses a method, further comprising the steps of: determining if the audio input has a close match in the vocabulary (Column 5 lines 36-41); displaying the close matches (Column 5 lines 38-46; *options*); receiving input selecting a close match (Column 5 lines 38-46; *chosen options*); and storing the selected close match as part of the annotation object if the audio input has a close match in the vocabulary (Column 5 lines 52-57).

As per claim 32, which is dependent on claim 30, Anderson discloses the method, further comprising the step of displaying a message that the image has not been annotated if there is neither a matching entry in the vocabulary nor a close match in the vocabulary (Column 5 lines 46-51).

As per claim 33, which is dependent on claim 30, Anderson discloses a method, further comprising the following steps if there is neither a matching entry in the vocabulary nor a close match in the vocabulary: receiving text input corresponding to

the audio input (Column 5 lines 46-51); updating the vocabulary with a new entry including the audio input and the text input (Column 5 lines 50-51); and wherein the received text is stored as part of the annotation object (Column 5 lines 52-57).

As per claim 34, which is dependent on claim 26, Anderson discloses a method, further comprising the steps of: receiving text input corresponding to the audio input (Column 46-51); updating the vocabulary with a new entry including the audio input and the text input (Column 5 lines 50-51).

As per independent claim 40, Anderson discloses a method for retrieving images, the method comprising the steps of: receiving audio input (Column 6 lines 9-11); determining annotation objects that reference a close match to the audio input (Column 6 lines 34-42); retrieving the images that are referenced by the determined annotation objects (Column 6 lines 41-42); and displaying the retrieved images (Column 6 lines 34-42).

9. Claims 35-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin ("Lin", An Ink and Voice Annotation System for DENIM).

As per independent claim 35, Lin discloses a method for displaying objects with annotations, the method comprising the steps of: retrieving an image (Page 3 Figure 4a); displaying the image with a visual notation that an annotation exist (Page 3 Figure 4c item 1); receiving user selection of an image (Page 3 Figure 4a selected from Page 2 Figure 2); and outputting a notation associated with the selected image (Page 3 Figure 4b and 4c).

As per claim 36, which is dependent on claim 35, Lin discloses a method wherein the annotation is text and the step of outputting is displaying the text proximate an image that it annotates (Page 3 Figure 3).

As per claim 37, which is dependent on claim 35, Lin discloses a method wherein the annotation is an audio signal and the step of outputting is playing the audio signal (Page 3 Figure 4b).

As per claim 38, which is dependent on claim 35, Lin discloses a method further comprising the steps of determining whether the annotation includes text (Page 3 lines 4-12); retrieving a text annotation for the selected image (Page 3 lines 4-12); and displaying the retrieved text with the image (Page 3 Figure 3).

As per claim 39, which is dependent on claim 35, Lin discloses a method further comprising the steps of: determining whether the annotation includes an audio signal (Page 3 Figure 4c item 1); retrieving a audio signal for the selected image (Page 3 lines 16-17); and wherein the step of outputting is playing the audio signal (Page 3 Figure 4b).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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11. Claims 3,8,13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson ("Anderson", US 6,499,016) in view of Lin ("Lin", An Ink and Voice Annotation System for DENIM).

As per claim 3, which is dependent on claim 1, Anderson fails to distinctly point out an audio output module when a user selects an annotation symbol. However, Lin teaches an apparatus further comprising an annotation audio output module coupled to the direct annotation creation module (Page 3 lines 13-19), the annotation audio output module generating audio output in response to user selection of an annotation symbol representing an annotation object (Page 3 Figure 4c item1). Therefore it would have been obvious to an artisan at the time of the invention to combine the apparatus of Anderson with the current teaching of Lin. Motivation to do so would have been to reduce confusion often caused by deciphering comments in email or handwritten notes by using audio outputs.

As per independent claim 8, Anderson discloses an apparatus for direct annotation of objects, the apparatus comprising: a direct annotation creation module coupled to receive an input audio signal and a reference to an image (Column 4 lines 61-63), the direct annotation creation module creating an annotation object that associates the input audio signal and the image (Column 5 lines 31-35). Anderson fails to disclose an annotation audio output module coupled to the direct annotation creation module, the annotation audio output module generating audio output in response to user selection of an annotation symbol representing the annotation object. However, Lin teaches an annotation audio output module coupled to the direct annotation creation

module (Page 3 lines 13-19), the annotation audio output module generating audio output in response to user selection of an annotation symbol representing the annotation object (Page 3 Figure 4c item1). Therefore it would have been obvious to an artisan at the time of the invention to combine the apparatus of Anderson with the current teaching of Lin. Motivation to do so would have been to reduce confusion often caused by deciphering comments in email or handwritten notes by using audio outputs.

As per claim 13, which is dependent on claim 10, Anderson fails to disclose selecting portions and annotating each portion. However, Lin teaches a method wherein the step of detecting selection includes detecting a portion of the image (Page 3 lines 15-16); and wherein the annotation creates an association between the portion of the image and the audio input (Page 3 lines 13-19). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Anderson with the current teaching of Lin. Motivation to do so would have been to not limit an image with one or more objects to just one annotation to summarize the whole image.

As per claim 14, which is dependent on claim 10, Anderson fails to distinctly point out displaying a visual notation. However, Lin teaches a method further comprising the step of displaying a visual notation that the image has an annotation (Page 3 lines 17-19 and Figure 4c item1). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Anderson with the current teaching of Lin. Motivation to do so would have been to alert the user of an annotation in the image.

As per claim 15, which is dependent on claim 14, Anderson fails to distinctly point out the symbol being text or a symbol. However, Lin teaches the visual notation being

text or a symbol (Page 3 Figure 4a-c). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Anderson with the current teaching of Lin. Motivation to do so would have been to alert the user of an annotation in the image.

12. Claims 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson ("Anderson", US 6,499,016).

As per claim 41, which is dependent on claim 40, Anderson discloses a method wherein the step of determining annotation objects further comprising the steps of: comparing the audio input to an audio signal reference by an annotation object (Column 5 lines 30-35); and determining a close match between the audio input to the audio signal reference by an annotation object if a probability metric is greater than an a threshold (Column 5 lines 35-38). Anderson fails to disclose a threshold of 80%. However, Official Notice is taken that a threshold of 80% is well known in the art, 80% is not a definitive threshold, and could be replaced by any other value. Therefore it would have been obvious to combine the method of Anderson with the current teaching. Motivation to do so would have been to provide a standard of matching.

As per claim 42, which is dependent on claim 40, Anderson discloses a method wherein the step of determining annotation objects further comprising the steps of: determining the annotation objects for a plurality of images; for each annotation object, comparing the audio input to an audio signal reference by an annotation object (Column 5 lines 30-35); and determining a close match between the audio input to the audio signal reference by an annotation object if a probability metric is greater than an a

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threshold (Column 5 lines 35-38). Anderson fails to disclose a threshold of 80%.

However, Official Notice is taken that a threshold of 80% is well known in the art, 80% is not a definitive threshold, and could be replaced by any other value. Therefore it would have been obvious to combine the method of Anderson with the current teaching.

Motivation to do so would have been to provide a standard of matching.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US005881360A teaches audio signal comparison.
- US005600775A teaches annotation of video images.
- US005546145A teaches annotations of image frames associated with voiced messages.
- US006101338A teaches speech recognition for images.
- US006226422B1 image annotations, selecting images with audio playback.
- US006388681B1 audio annotations for images.
- US006401069B1 text and audio annotations associated with images.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan F Pitaro whose telephone number is 571-272-4071. The examiner can normally be reached on 7:00am - 4:30pm Monday through Thursday, and on alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on 571-272-4063. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan Pitaro
Patent Examiner
Art Unit 2174

RFP

Application/Control Number: 10/043,575

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